

CLAIMS

1. Multipart mill housing for edging stands in rolling mills, which consists of main components (1), such as crossheads (1a; 1b) and longitudinal beams (4a; 4b), which are joined by bolts, characterized by the fact that in a multipart embodiment of the main components (1), which consists of the two crossheads (1a; 1b) and the four longitudinal beams (4a, 4b), a common joint (3) with a cruciform structure (7) is provided for the crosshead (1a, 1b) and the longitudinal beam (4a, 4b) at each of the upper and lower ends (6) of the longitudinal beams (4a, 4b), wherein prestressed through-bolts (5) that act as joints are used at least at the upper ends (6) of the longitudinal beams.

2. Mill housing in accordance with Claim 1, characterized by the fact that each crosshead (1a, 1b) is realized as a single piece and has a crosshead base (8) for mounting the crosshead on a bottom plate.

3. Mill housing in accordance with Claim 1 or Claim 2, characterized by the fact that the crossheads (1a; 1b) form an assembly by positive locking with the longitudinal beams (4a; 4b) and with the prestressed through-bolts (5).

4. Mill housing in accordance with any of Claims 1 to 3, characterized by the fact that at least the crossheads (1a; 1b) and the longitudinal beams (4a; 4b) are made of cast materials.

5. Mill housing in accordance with any of Claims 1 to 4, characterized by the fact that the through-bolts (5) are arranged in pairs symmetrically to the center plane (9).

6. Mill housing in accordance with any of Claims 1 to 5, characterized by the fact that in addition to the through-bolts (5), screw bolts (10) are arranged in pairs symmetrically to the center plane (9).

7. Mill housing in accordance with any of Claims 1 to 6, characterized by the fact that the longitudinal beams (4a; 4b) are mounted in each crosshead (1a, 1b) by the cruciform structure (7), the through-bolts (5), and the screw bolts (10).

8. Mill housing in accordance with any of Claims 1 to 7, characterized by the fact that the crosshead (1a; 1b) is provided with a cruciform pocket (12), which is engaged by an inner key form (19a) and an outer key form (19b).

9. Mill housing in accordance with any of Claims 1 to 8, characterized by the fact that the cross-sectional transitions (2a; 2b) in the crosshead (1a; 1b) and/or in the longitudinal beams (4a, 4b) are provided with radii of suitably matched size

according to the operating force and impact force.

10. Mill housing in accordance with any of Claims 1 to 9, characterized by the fact that the cruciform pockets (12) of the crosshead (1a; 1b) and the cruciform key forms (19) of each end (6) of a longitudinal beam are provided with chamfers (14).

11. Mill housing in accordance with any of Claims 1 to 10, characterized by the fact that not only the through-bolts (5) but also the screw bolts (10) are designed as necked-down bolts and, like the through-bolts (5), have a heating hole (15), threaded ends (16) and centering shoulders (17) to facilitate assembly.

12. Mill housing in accordance with any of Claims 1 to 11, characterized by the fact that the crosshead (1a; 1b) is separated into a crosshead upper part (1c) and a crosshead lower part (1d), and the upper part (1c) and lower part (1d) are joined by means of a shrink ring, a flange joint, or a connector.